

Listing of Claims:

Claims 1-19 (Cancelled)

20. (Original) A method of viscosupplementation for medical purposes which comprises contacting body tissue with a biocompatible viscoelastic gel slurry comprising a compound comprising hyaluronan cross-linked with a polyfunctional cross-linking agent having two or more aziridines, wherein the equivalent ratio of hyaluronan to aziridine is 1:1 to 1:10.

21. (Withdrawn) The method of claim 20 where the gel slurry further comprises a pharmacologically active agent.

22 (New) The method of claim 20 wherein the polyfunctional cross-linking agent is pentaerythritol tris(3-aziridinopropionate).

23 (New) The method of claim 20 wherein the polyfunctional cross-linking agent is selected from the group consisting of 1,1',1''-methylidynetris-aziridine; 1,1',1''-methylidynetris[2,2-dimethyl]-aziridine; 1,1'-[2-(1-aziridinylmethyl)-1,3-propanediyl]bis-aziridine; 1-aziridinepropanoic acid, 2,2-bis[[3-(1-aziridinyl)-1-oxopropoxy]methyl]-1,3-propanediyl ester; 1-aziridinepropanoic acid, 2-propyl-, 2-(hydroxymethyl)-2-[[1-oxo-3-(2-propyl-1-aziridinyl)propoxy]methyl]-1,3-propanediyl ester; 1-aziridinepropanoic acid, 2,2-dimethyl-, 2-[[3-(2,2-dimethyl-1-aziridinyl)-1-oxopropoxy]ethyl]-2-(hydroxymethyl)-1,3-propanediyl ester; di[2-(1-aziridinyl)ethyl]adipate; 1,3-bis(1-aziridinyl)-3-phenyl-1-propanol; 1,1'-(1,3-propanediyl)bis-2-aziridinecarbonitrile; α , β -bis(1-aziridinyl) 2-furanpropanol; 1-[3-(1-aziridinyl)propionyl]-aziridine; 1,3-bis(1-aziridinyl)-2-propanol; 1,3-bis(2-methyl-1-aziridinyl)-2-propanol; (1-aziridinylpyruvoyl)-, 1-[(p-nitrophenyl)hydrazone] aziridine; and 1,1'-(1,3-dioxo-1,3-propanediyl) bis-aziridine.

24 (New). The method of claim 20 wherein the polyfunctional cross-linking agent has two aziridines.

25 (New). The method of claim 20 wherein the polyfunctional cross-linking agent has three aziridines.

26 (New). The method of claim 20 wherein the hyaluronan has a molecular weight of 500 kDaltons or more.

27 (New). The method of claim 20 wherein the viscosupplementation is to treat articular defects.

28. (New) The method of claim 20 wherein the viscosupplementation is to treat articular cartilage defects.

29. (New) The method of claim 28 wherein the articular cartilage defects are located in the knee, hip or shoulder.

30. (New) The method of claim 20 wherein the viscosupplementation is to treat osteoarthritis.